

Date: Monday, 1/8/2007 10:53:20 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: STRUT WELDMENT ASS'Y
Job Number	: 30159		
Estimate Number	: 10564		
P.O. Number	: <u>N/A</u>	Part Number	: D34433
This Issue	: 1/8/2007 S.O. No. : <u>N/A</u>	Drawing Number	: D3443 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <u>N/A</u> Type : MACHINED PARTS	Drawing Revision	: B
Previous Run	: 28552	Material	: <u>N/A</u>
Written By	: <u>JA 07.01.08</u>	Due Date	: 1/30/2007
Checked & Approved By	: <u>JA 07.01.08</u>	Qty:	6 Um: Each
Comment	: Est Rev: A 05.11.14 New issue EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0 M304R1500

M103156

Comment: Qty.: 0.2500 f(s)/Unit Total : 1.5000 f(s)

2.0 HARDINGE

HARDINGE CNC LATHE SMALL



Comment: HARDINGE CNC LATHE SMALL  
 1-TURN AS PER FOLIO FA588 & DWG D3443  
 FOLIO REV: AA  
 DWG REV: B

2-DEBURR AS REQUIRED

BC 07.04.12 7

3.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

BC 07.04.12 7

4.0 HAAS1

HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1





1- Mill as per Folio FA588 Rev: AA & Dwg D3443 Rev: B

2-Deburr per dwg D3443

IL 07/06/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/07/19  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07/06/19	4	- 1 part is scrapped part turned in collet while machining <del>Race</del>	 05/10/12	Scrap and Destroy no Replace	J.L. 07/06/19	En 07/06/19	 05/10/12	En 07/06/19
07/07/04	6	1 part is scrapped because the .128" hole is .100" off.	 05/10/12	Scrap and Destroy no replace	J.F. 07/07/04	En 07/07/04	 05/10/12	En 07/07/04

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:53:20 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 30159

Part Number: D34433

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.L. 07/06/19

6.0

MILLING CONV.

CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE

Drill hole as per Dwg D3443.

J.F. 07/07/06

(5)

7.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 07/07/06

(5)

8.0

QC8

SECOND CHECK



Comment: SECOND CHECK

Amk 07/07/09

(5)

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST102

P 7/7/9 (5)

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

D 07/07/09

Job Completion



C 07/07/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

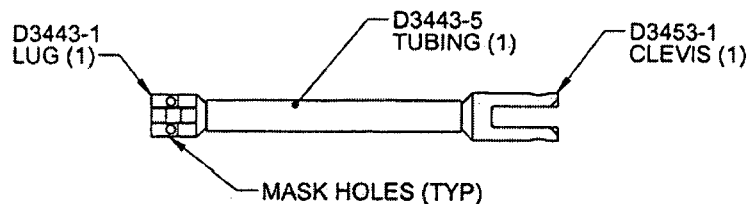
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

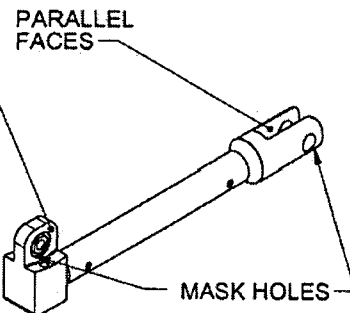
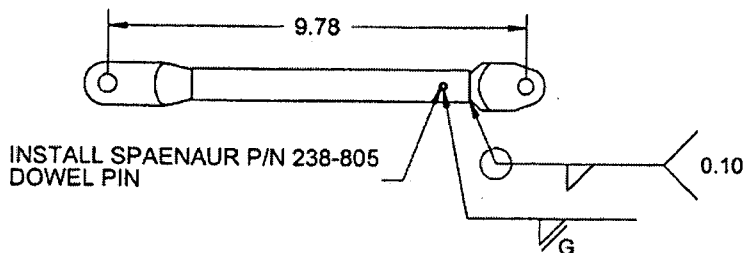
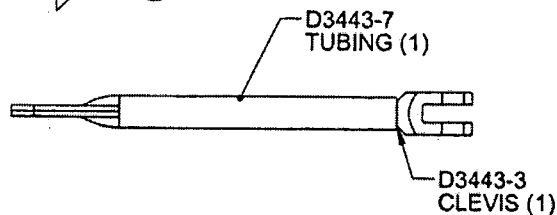
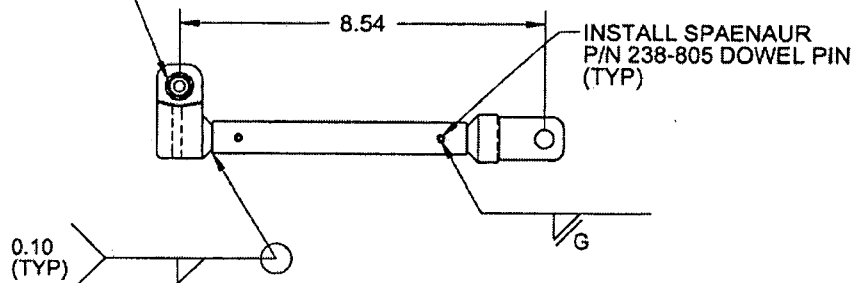
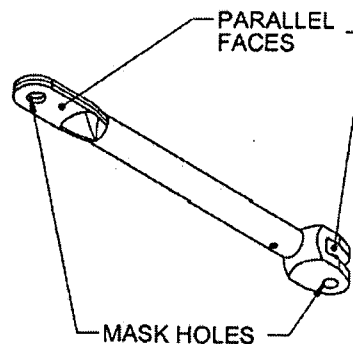
NOTE: Date & initial all entries

**DART**

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3443</b>	REV. B SHEET 1 OF 3
DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b> SCALE 1:4		
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & $\phi 0.125$ WAS #30	

**RELEASED**05.12.09 *[Signature]*

PRESS FIT McMASTER-CARR P/N 63215K32  
BALL JOINT BEARING AFTER POWDER COAT

**D3443-041****NOTES:**

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER

**D3443-043**

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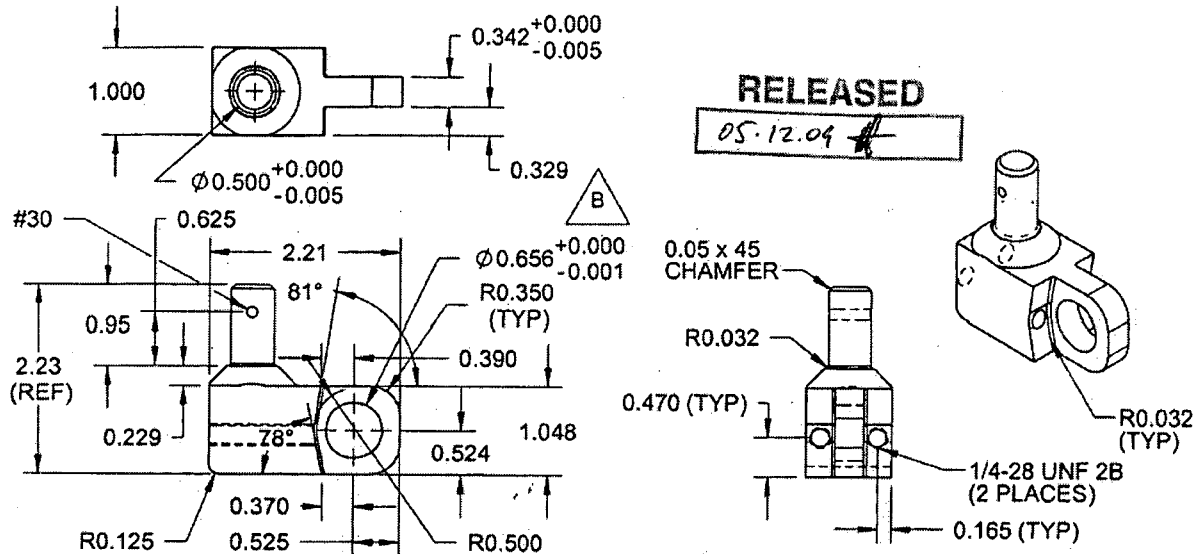
WORK ORDER  
NO. **30159**

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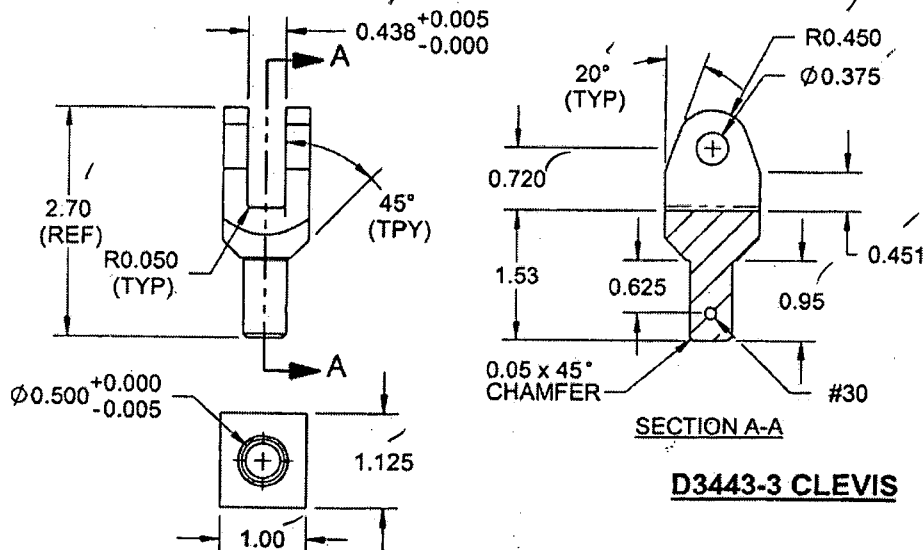
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DATE <b>05.12.05</b>	TITLE <b>STRUT WELDMENT ASSEMBLY</b> SCALE		

**D3443-1 NOTES:**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)

**D3443-3 NOTES:**

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

**GENERAL NOTES:**



- 2) FINISH: NONE  
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
4) ALL DIMENSIONS ARE IN INCHES  
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

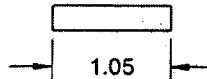
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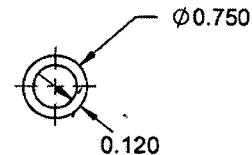
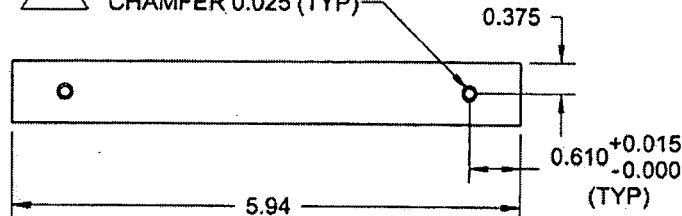
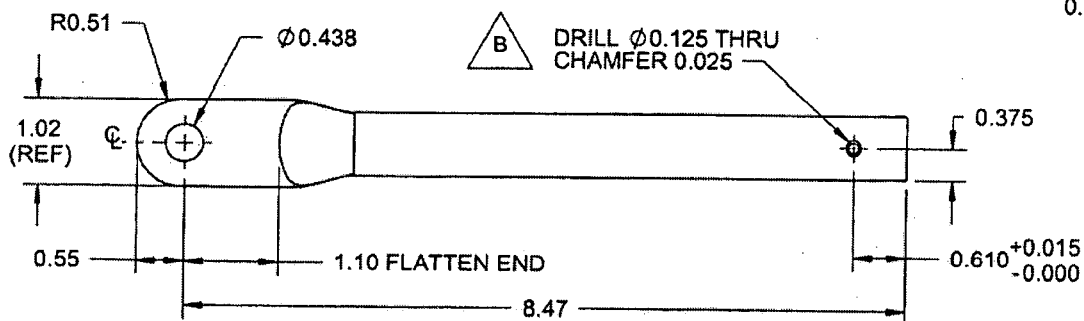
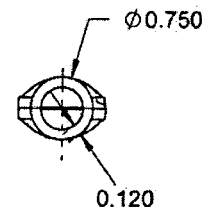
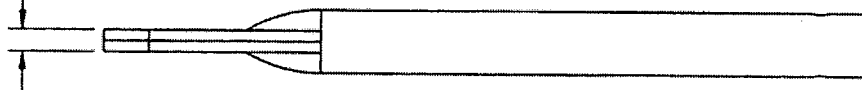
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CHECKED 	APPROVED 	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:2		

 $\phi 0.210^{+0.005}_{-0.010}$ **D3443-9 PIN****D3443-9 NOTES:**

- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

**RELEASED**05.12.09 DRILL  $\phi 0.125$  THRU  
CHAMFER 0.025 (TYP)**D3443-5 TUBING** $0.260^{+0.000}_{-0.030}$ DRILL  $\phi 0.125$  THRU  
CHAMFER 0.025**D3443-5/7 TUBING****D3443-5/7 NOTES:**

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TR0.7500W.120)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

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<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 30159
<b>Description:</b> Crosstube Assembly <i>Start Weldment Assy</i>		<b>Part Number:</b> 3443-3
<b>Inspection Dwg:</b> 3443	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	$\phi .500$	$\pm .000$	.498	✓		
	45°	$\pm 1/2^\circ$	45°	✓		
	.95	$\pm .03$	.942	✓		
	.05 x 45°	$\pm .01$	.05	✓		
SIDE B	2.7	$\pm .030$	2.703	✓		
	1.00	"	.996	✓		
	1.125	$\pm .010$	1.122	✓		
	.438	$\pm .005$	.441	✓		
	20°	"	20°	✓		
	$\phi .375$	$\pm .006$	.378	✓		
	.451	$\pm .010$	.455	✓		
	.95	$\pm .030$	.947	✓		
	1.53	"	1.534	✓		
	.720	$\pm .010$	.725	✓		
	.625	$\pm .010$	.625	✓		

<b>Measured by:</b> BG	<b>Audited by:</b> <i>Amf</i>	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 07/04/12	<b>Date:</b> 07/07/09	<b>Date:</b>	N/A

<b>Rev</b>	<b>Date</b>	<b>Change</b>	<b>Revised by</b>	<b>Approved</b>
A		New Issue	KJ/JLM	